

IN THE CLAIMS:

Please amend Claims 17 and 19-22, as follows.

1. to 16. (Canceled).

17. (Currently Amended) A computer-implemented method of rendering an image comprising a plurality of overlapping graphic objects, the computer comprising a processor configured to implement the method and a computer readable storage medium to store the plurality of overlapping graphic objects, said method comprising the steps of:

generating a list of input edges in accordance with a plurality of boundaries of the plurality of overlapping graphic objects, wherein some of the input edges are overlapping;

producing a list of non-intersecting edges from the list of input edges on a per-scan-line basis; and

rendering the image based on the produced list of non-intersecting edges, wherein

the list of non-intersecting edges form defines (a) a plurality of boundaries of a plurality of non-overlapping graphic objects that are visually equivalent to the plurality of overlapping graphic objects and (b) a color for each of the plurality of non-overlapping graphic objects; and

at least one non-intersecting edge replaces a plurality of overlapping input edges, the non-intersecting edge being shared by more than one of the non-overlapping graphic object objects.

18. (Canceled).

19. (Currently Amended) An apparatus for rendering an image comprising a plurality of overlapping graphic objects, said apparatus comprising:

generating means for generating a list of input edges in accordance with a plurality of boundaries of the plurality of overlapping graphic objects, wherein some of the input edges are overlapping;

producing means for producing a list of non-intersecting edges from the list of input edges on a per-scan-line basis; and

rendering means for rendering the image based on the produced list of non-intersecting edges, wherein

the list of non-intersecting edges ~~form~~ defines (a) a plurality of boundaries of a plurality of non-overlapping graphic objects that are visually equivalent to the plurality of overlapping graphic objects and (b) a color for each of the plurality of non-overlapping graphic objects; and

at least one non-intersecting edge replaces a plurality of overlapping input edges, wherein the non-intersecting edge is shared by more than of the one non-overlapping graphic object objects.

20. (Currently Amended) A computer readable medium storing a computer program for directing a processor to execute a method for rendering an image comprising a plurality of overlapping graphic objects, said program comprising:

code for generating a list of input edges in accordance with a plurality of boundaries of the plurality of overlapping graphic objects, wherein some of the input edges are overlapping;

code for producing a list of non-intersecting edges from the list of input edges on a per-scan-line basis; and

code for rendering the image based on the produced list of non-intersecting edges, wherein

the list of non-intersecting edges ~~form~~ defines (a) a plurality of boundaries of a plurality of non-overlapping graphic objects that are visually equivalent to the plurality of overlapping graphic objects and (b) a color for each of the plurality of non-overlapping graphic objects; and

at least one non-intersecting edge replaces a plurality of overlapping input edges, wherein the non-intersecting edge is shared by more than one of the non-overlapping object graphic objects.

21. (Currently Amended) A computer-implemented method according to claim 17, wherein the producing step comprises the steps of:

maintaining a list of active edges comprising a plurality of input edges that intersect a current scan-line, and

deriving from the active edges a list of corresponding output edges to include the non-intersecting edges.

22. (Currently Amended) A computer-implemented method according to claim 21, wherein the deriving step comprises the steps of:

creating a new output edge when an active edge does not have a corresponding output edge; and

terminating the output edge when the output edge does not have a corresponding active edge.